Pixel interpolation filters for video decompression processor

Publication number: EP0712249

Publication date: 1996-05-15

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Classification:

- International: H04N7/32; H04N7/26; H04N7/36; H04N7/46; H04N7/50;

H04N5/14; H04N7/32; H04N7/26; H04N7/36; H04N7/46; H04N7/50; H04N5/14; (IPC1-7): H04N7/24

- european: H04N7/26L2; H04N7/26L4; H04N7/26M2S;

H04N7/36C4; H04N7/46E; H04N7/50

Application number: EP19950116378 19951018
Priority number(s): US19940335651 19941108

Also published as:

以S5638128 (A1) 以JP8237662 (A) 及EP0712249 (A3) 足EP0712249 (B1)

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Cited documents:

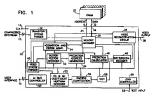
EP0572263 EP0503956 EP0613304 XP000583293

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Abstract of EP0712249

A method and apparatus are disclosed for interpolating pixels (80) to obtain subpels for use by a video decompression processor. A prediction area (90) is defined from which subpels are necessary to decompress a portion of a video image. Instead of reading all of the pixels from the prediction area and then processing them together to perform the necessary interpolation, portions of the pixel data are read and simultaneously averaged using inplace computation in order to reduce hardware requirements. Rounding of subpixel results is achieved using the carry input of conventional adders (114, 116, 118, 120, 148) to add a binary "1" to the averaged pixels, which are subsequently truncated (150) to provide the interpolated subpels.



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